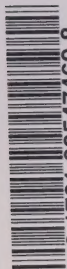


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WORKSHOP ON HOUSING HYGIENE AND
ENVIRONMENTAL HEALTH PROBLEMS IN URBAN FRINGES

Ankara, 13-17 May 1985

EXECUTIVE SUMMARY

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1. Introduction

A number of housing hygiene and environmental health problems in the urban fringes of many Mediterranean countries led the WHO Regional Office for Europe to convene this workshop in Ankara to discuss these problems and to propose measures for improving conditions in these areas.

The Workshop was convened as a follow-up to a WHO workshop on housing hygiene in Mediterranean countries held in Split in May 1983. The current meeting was attended by more than 50 sanitary engineers from 11 countries (Annex 1).

The Workshop had three objectives. The first was to discuss the public health and hygiene aspects of low-cost dwelling design, the environmental health requirements in "site and services" projects, appropriate building design criteria to prevent domestic accidents, appropriate technology to improve basic sanitation in squatter settlements, and the role of primary health care in peri-urban areas.

The second was to examine the problems of existing squatter and low-cost housing in Turkey, including a review of the legislative, developmental and planning aspects of housing in Turkey, squatter prevention and upgrading policies, and a description of the two squatter prevention and settlement projects in Aktepe and Gunesevler.

Finally, the Workshop was used to disseminate WHO guidelines and recommendations relating to the housing hygiene and environmental health aspects of human settlements and planning, and to discuss specific proposals and requirements for a follow-up project in Turkey.

A list of the working papers is given in Annex 2.

2. Environmental Health and Housing Hygiene Aspects of Aktepe Squatter Prevention Area and Gunesevler Squatter Settlement

A site visit was arranged to the two project settlement areas at Aktepe and Gunesevler following the presentation of the case studies by Dr B. Tokman and Dr E. Dogukan from the Building Research Institute, Ankara.

Subgroups covering health, environment and social infrastructure were set up. On the basis of discussions in the subgroups, observations on the two projects under review were made. However, hard and fast remedies or detailed policy proposals were not possible due to time constraints.

2.1 Health considerations

Four broad areas which seemed relevant to the objectives of the workshop were identified:

- provision of preventive and curative health services;
- evidence of excessive disease or illness;
- general state of health; and
- opportunities for action.

1. The environmental health project should be provided within the framework of primary health care and the objectives of Health for all by the year 2000.
2. The absence of a health centre at Gunesevler is a serious omission in relation to the health needs of the residents.
3. Health education facilities seem to be very poor and could be improved both locally through health care facilities and nationally by mass education programmes using TV and mass media facilities.
4. There are further opportunities for health education ventures through home visits and community education participation projects.
5. Epidemiological information appears to have been collected but does not seem to have been analysed in relation to health trends and housing hygiene conditions within the two project areas. Such analysis would assist in identification of causal factors of disease.
6. The high incidence of enteric and parasitic infections among children in the Gunesevler area is directly attributable to poor drainage and sanitation facilities and contaminated water supplies.
7. Although the surveys show a low reporting of home accidents, there were several potential hazards by falls from unprotected ledges and crude walkways in the squatter settlement area. In Aktepe, the health centre confirmed that burns and poisoning of children are not uncommon occurrences.
8. In both project areas the children and their clothing were extremely clean, but impetigo of the skin seemed quite widespread.
9. Children in the project areas appeared to be small in comparison with others of similar age in other countries. This factor could be related to poor nutrition as well as other factors. However, comparisons of this type should be made with other Turkish children rather than with other countries.
10. Changing attitudes of people towards their health problems is as important as the provision of civil engineering projects.
11. Turkish health delegates agreed that intersectoral and intrasectoral services were deficient and that evaluation of the problems was insufficient. Better collaboration between health officials and civil engineers was needed.
12. It was agreed that the provision and distribution of health centres, nursing services and general practitioners services are particularly needed in Secekodu settlements.

2.2 Environmental issues

Three broad areas were identified for discussion:

- sanitation facilities;
- the external environment; and
- the condition of the shelter.

1. Solid waste disposal facilities are inadequate, e.g. bins were too heavy to be emptied directly into refuse vehicles.
2. The presence of water supply pipes embedded in sewage is an obvious source of water contamination.
3. The absence of inspection chambers to the sewage system prevents day-to-day maintenance and cleaning of pipes.
4. A survey of water quality is needed to give an indication of water bacteriological quality.
5. Improvements to the external environment of both settlements are needed.
6. It was stressed that a space needs to be defined in relation to its intended uses; otherwise, it becomes used for unplanned garbage dumps.
7. The absence of planned play areas means that children must play in the road.
8. Specific pedestrian walkways are lacking, creating a potential road-safety hazard to children. Similarly, pedestrian walkways needed to be set up properly.
9. The prefabricated "core" housing units at Aktepe are difficult to adapt and extend due to design limitations. Thermal insulation properties are also poor. Further work in design and construction of low-cost units should be implemented.
10. The communal sharing of open space for condominiums has evidently presented problems regarding maintenance and use.
11. The absence of stormwater drainage at Gunesevler has caused serious land erosion, exposing drains to frost and other damage.
12. Drainpipes with flexible joints should be used for infrastructures since the use of fixed joint construction is a common cause of leakage and contamination of water supplies.
13. The improvement of thermal insulation requirements by roof insulation would have an immediate impact both on reducing heat transmission and the incidence of respiratory diseases in children relatively cheaply.
14. The improvement of housing hygiene (including recognition of the importance of personal washing facilities inside housing to reduce enteric diseases spread by contact) should be a priority of any future upgrading programme.
15. The Turkish delegates suggested that more emphasis needs to be placed on action programmes aimed at remedying existing problems and on a better definition of institutional roles in squatter prevention and settlement areas.
16. There was uncertainty whether the two pilot projects are representative of what could be achieved in other squatter areas and whether further resources should be put into these projects vis-a-vis other untouched areas.
17. Policy guidelines for the implementation of future squatter projects are needed, based on the experience of the two project areas.

18. Extension to core houses is difficult in many cases due to location on the plot and roof construction.
19. The majority of buildings in Ankara are unauthorized, creating problems in controlling development according to control standards.
20. There are three main outputs relevant to environmental issues: technical and administrative capacity of the country to provide acceptable environmental conditions; financial resources; and human behaviour in relation to the environment.

2.3 Social infrastructure considerations

1. Involvement of the community is needed at all planning stages.
2. Implementation of some immediate improvement measures by authorities would act as a catalyst for action by the communities themselves.
3. Strengthening of local relationships between the community and local institutions such as municipalities and health centres is needed.
4. Local community leaders could be useful to form a bridge between the community and local institutions.
5. The particular role of women as the main service users in Secekondu areas needs to be recognized and harnessed.
6. As most of the squatter inhabitants are village migrants, there is a danger that cultural ties and identities are impaired. However, cultural development could be encouraged by giving support to craft and cottage industries on site.
7. Migrants have special needs for advice and help when resettling in urban areas.
8. Support to volunteers and field social workers within the areas would provide first-hand practical help and form an additional bridge between the community and the relevant authorities.

3. The Role of Institutional Services within the Context of Squatter Settlements

Four primary institutions were identified:

- municipalities;
- Ministry of Health and Social Assistance; Ministry of Public Works, Construction and Settlement;
- squatter settlers; and
- international organizations.

3.1 Role of the municipalities

Mrs V. Tokman from Ankara Municipality prescribed the current planning proposals for squatter settlements in Greater Ankara. These proposals were largely based on aerial photographs showing existing boundaries of squatter settlements. The vast financial implications of providing infrastructural assistance in the planned settlement areas were outlined.

1. The vertical extension of core buildings on small plots is the most likely result of accommodating additional migration, despite the general opposition of the municipalities towards high-rise apartment housing. This trend is being accelerated by building contractors demolishing old buildings to build apartments and profiting from the additional rent.
2. Since urban plans have not traditionally been observed, social pressure on inhabitants to observe good housing and environmental conditions would be more effective. This could be partly achieved by creating a better bridging of social responsibility between the municipality and community.
3. In some cases it would be preferable to move people from unhealthy squatter areas to better areas.
4. The model of apartment housing in Aktepe is not thought suitable for rural areas, but conversion of existing apartment housing in central city areas could provide additional housing units.
5. Although the standard of squatter housing in Turkey is better than in other countries, conditions in the Secekondü areas still require urgent action.
6. The role of ministries should be policy formulation, adoption of a housing hygiene environmental code and perhaps providing model housing for replication elsewhere. The municipalities should take responsibility for the provision of infrastructures and utilities and provide technical inspection and assessment facilities for housing. The public should be encouraged to take responsibility for maintenance of private housing.
7. Architects and planners do not have the tools to deal with the problems of cities. Master plans quickly became outdated in periods of rapid migration and urbanization. There is a need to find out the right information quickly and to act on information quickly. Ankara appears to be developing without any professional intervention of planning authorities.
8. There should be more incentive to encourage useful housing development rather than to adopt a policing role of stopping it, i.e. "The process of development was more important than the data relating to it".
9. More incentive needs to be given to identifying people's needs in terms of finance, materials or advice and determining the degree of private or public intervention. This can be applied only on an individual level.
10. Training programmes to raise standards should include participation of the people taking into account their own needs. This expanded role would improve harmony on all sides.

3.2 Role of ministries

1. It was felt that the Ministry of Health and Social Assistance already knew about most of the health/housing problems in Secekondü areas and had developed plans and solutions to these problems. However, these solutions were hampered by the following problems:

- (a) Restricted financial resources.
- (b) No coordination between organizations or institutions on implementation or exchange of information.
- (c) Cultural problems arising from different expectations of experts from those of the community and between the experts and the relevant authorities.

(d) Housing and environmental health laws are not enforced either by the authorities or the people themselves.

(e) Absence of a clear definition of each ministry's role, which often results in overlap and subsequent weakness of authority in terms of implementation.

(f) The Ministry of Health is passive rather than active in relation to policy implementation, i.e. it has the authority without the power.

2. The role of education, advice and health care as administered by the Ministry of Health and Social Assistance should be regarded as an economic investment. In this respect, financial resources to this need to be strengthened.

3. Criteria in relation to distribution of finance in Secekondu areas are needed within the Ministry of Public Works and Reconstruction.

4. There is a need for a re-assessment of approaches towards implementation of policy in Secekondu areas. For example, policy decisions are taken but not implemented in planned Ankara settlement areas, and improvement plans are not implemented.

5. Internal re-organization of municipalities is needed to redress this problem.

6. The section in the 1965 Squatter Settlement Law relating to provision of housing credits to individual households has not been implemented.

7. The heavy financial burden of paying for infrastructures necessitates a heavy budget commitment.

8. It was questioned whether using the same technology for Secekondu areas as for traditional areas was sensible. Perhaps new technology criteria are needed for Secekondu assessment.

9. Internal training programmes are needed within the Ministry of Public Works and Resettlement on the problems in Secekondu areas since many units within the Ministry had little comprehension of the size of the problem.

10. Identification of new ownership patterns and physical building innovations in Secekondu areas is needed.

11. Much is already known about the problem of squatter settlements, and priorities could perhaps now be established.

12. The formation of an interprofessional and interdirector task force to learn from the experience of the two projects and to work together on future projects could assist policy implementation.

13. Local community groups should be given encouragement to decide on local needs.

14. Research into the acceptability of high-rise flats as a building form in squatter settlements should be initiated before planning new settlement upgrading programmes.

15. Although freedom of choice for the community should in general be encouraged, control standards are still needed to deal with certain situations; for example, in the provision of infrastructures which are far better administered by technical experts.

3.3 Role of squatters

1. Visiting doctors and others going into houses have a good opportunity for health education and training. Expert should harness public participation and help people to help themselves.
2. Officials of the Ministry of Health and Social Assistance felt that health centres provide an ideal opportunity for monitoring health with the aid of health records and for giving immediate advice and practical help to squatters.
3. The Municipalities, however, have no sanitarians, environmental health officers or sociologists available to give information and help. Similarly, there are no advice centres or bureaux easily available for giving advice and practical assistance.
4. Statistical studies were being initiated in some parts of Turkey to collect information on environmental conditions in relation to health indices, and these assist identification of major problems in a particular area.

3.4 Role of international institutions

1. The role of the UN and WHO in particular is mainly constitutional and advisory in the development of primary health care facilities and implementation of environmental health provision in urban fringes.
2. WHO, in conjunction with UNICEF and United Nations Development Programme (UNDP), can advise and assist with the development of standards and policy tools. Further help to mobilize international resources towards a demonstration project can also be given, although WHO is not itself a funding agency for development programmes.
3. UNDP can conduct pre-investment studies and can finance construction work by multinational or bilateral agreements initiated by WHO and other bodies.
4. A multidisciplinary National Turkish Health Group of the International Union of Architects includes members from Government and nongovernmental organizations (with executive functions) who can advise on housing hygiene matters.
5. UNDP has agreed to support the project submitted to them through the Ministry of Planning. This project would develop the two project areas through detailed planning, technical design, rehabilitation of shanty-town and existing housing and of health care facilities with a view to them becoming demonstration areas and a means of determining facilities for wider use.
6. The project would be managed by the Turkish experts, and the health input will be provided through the health care programme. However, WHO will assist with project planning through an international multidisciplinary team.
7. The need for multilateral financing and community participation at the construction stage was emphasized.
8. The idea of a national Turkish task force made up of members from a number of professional disciplines was suggested as one method for tackling the problems of Secekonduy settlements.
9. WHO assistance was requested to assist with the training of personnel to operate the new sewage works currently being constructed in Ankara.

4. Conclusions and Recommendations

4.1 Conclusions

1. The long-term policy objective should be to prevent unplanned squatter settlements from being built, since they are less cost-effective and more harmful to people's health than planned settlements. In the short term, however, existing settlements urgently need improving. They particularly need safe water supplies, suitable sanitation, proper disposal of food, waste and stormwater, and better thermal insulation of dwellings.
2. The following items would help strengthen primary health care in urban fringes: environmental health improvements, health care centres accessible to all the population and the adoption of health education programmes suitable for squatter settlers.
3. The Aktepe case study has achieved very positive results and experience that will improve the planning and development of future squatter prevention projects. However, low-cost, low-technology projects need to be developed that are accessible to low-income groups and replicable in other settlement areas.
4. The Gunesevler case study shows that the proposed internationally supported follow-up project could significantly improve primary health care, housing hygiene and environmental health facilities in the area.
5. In both pilot project areas, it is essential to improve community participation, health education and intersectoral liaison among the various institutions involved. National and local health education programmes initiated through television, newspapers, health centres and local health workers should be implemented immediately to reduce the spread of enteric and respiratory diseases among children, caused by poor housing hygiene and environmental conditions.

6. The broken and leaking sewers in the Gunesevler pilot area are a direct and immediate health hazard, which should be remedied as soon as possible through the proposed WHO-assisted project.

4.2 Recommendations

4.2.1 General

1. The public health authorities should give higher priority to ensuring that environmental health technicians regularly inspect squatter areas. In the long term, registered environmental health technicians should be attached to urban health centres to deal with problems in urban fringes.
2. Public health authorities should strengthen the development of primary and medical health care facilities, giving special emphasis to local health education projects in developing urban fringe areas.
3. The Turkish Government should review the applicability of the existing Turkish housing hygiene code, by reference in the first instance to the housing hygiene guidelines developed by the WHO Regional Office for Europe.
4. All efforts should be made to mobilize the financing and construction of the necessary water supply services in the Ankara metropolitan area and to extend the coverage of sewers to the whole region, including the urban

fringes. The Ankara municipality should also pay more attention to the collection of solid waste and the maintenance of water supply and sewerage network extensions, especially in urban fringes.

5. Public investment should be directed towards urban development, including land mobilization and technical infrastructures, and private financing for the construction and maintenance of dwellings should be encouraged.

6. Central and local governments should step up their efforts to control unhealthy conditions caused by excessive noise, air pollution, poor sanitation, inadequate sewerage and drainage facilities, and inadequate solid waste collection and public cleansing services. In addition, more attention needs to be given to ensuring that adequate green and recreational spaces are provided and that excessive housing densities, overcrowding and poor housing hygiene, including indoor climate, are avoided.

7. The Urban Planning Department of Ankara Municipality should develop and implement very low-cost urban development projects to accommodate the actual demographic growth, including the use of standardized prefabricated housing techniques that comply with basic housing hygiene requirements.

8. Future squatter prevention and upgrading programmes should include provision for basic sanitary measures, including inspection and maintenance facilities, flexible jointing methods for underground drainpipes, and suitable low-cost sewerage treatment plants.

9. On the basis of housing inspections, site-based project workers should provide more immediate advice and practical assistance to the owners of illegal dwellings to enable them to improve housing hygiene.

10. Consideration should be given to making building materials and structural components available to low-income squatter residents at subsidized or cost price so as to ensure that housing hygiene standards can be achieved.

11. Scientifically conducted studies into the causes of migration from the country to cities should be included in research programmes.

Continual research is also necessary into the socioeconomic and health problems accompanying moves to squatter settlements.

Research is needed into the self-help services and opportunities currently available in squatter settlements, particularly to identify the role of self-help bodies, municipalities and other institutional arrangements.

4.2.2 Specific

1. The project in the Aktepe squatter prevention area and the Gunesevler settlements area should continue.

2. The purpose of the follow-up project should be initially to improve public health and environmental health services in the pilot areas and secondly to use the experience gained to develop and apply a national policy for the rehabilitation and prevention of squatter settlements in other areas.

3. Criteria need to be established for issuing licences to illegal squatter dwellings and for setting priorities for the implementation of rehabilitation

programmes. A careful evaluation needs to be made of the validity of the models represented by the two project areas and whether they can be replicated or adapted to similar squatter areas.

4. The follow-up project needs to examine the institutional arrangements for organizing community participation, supplying technical and other assistance, and mobilizing individual resources for the rehabilitation of squatter settlements.

5. A WHO interdisciplinary team should advise and assist this project, in liaison with an intersectorally based Turkish task force that will plan and implement the project with financial assistance from the United Nations Development Programme and other financing agencies.

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ANNEX 2

LIST OF WORKING PAPERS¹

- TUR/RUD/002/6 Rev. 1 Review of Housing Hygiene, by E. Giroult
- TUR/RUD/002/7 Rev. 1 Basic Housing Hygiene Guidelines, by R.P. Ranson
- TUR/RUD/002/8 Primary Health Care in Peri-urban Areas, by S. Levine
- TUR/RUD/002/9 Domestic Hazards and their Prevention, by R.H. Jackson
- TUR/RUD/002/10 Appropriate Technology for Basic Sanitation Facilities in Shantytowns and/or Squatter Settlements, by A. Lobato de Faria
- TUR/RUD/002/11 Rev. 1 Policies and Recommendations of the United Nations Centre for Human Settlements (HABITAT) for Urban Slum and Squatter Settlements, by M.G. Hundsalz
- TUR/RUD/002/12 Environmental Health Requirements in the Design of Site-and-Services Projects, by R. Goethert
- TUR/RUD/002/13 Case Study on an Indian Urban Fringe, by P. Diemer
- TUR/RUD/002/14 General Information on the Housing Situation and Housing Policy in Turkey, by L. Erson
- TUR/RUD/002/15 General Information on Turkish Regulations regarding Housing Hygiene and Basic Sanitation for Human Settlements, by U. Unsal
- TUR/RUD/002/16 General Information on the Development Stages of Ankara and Planning Studies, by V. Okay
- TUR/RUD/002/17 The Problem of Shanty Towns with Regard to Public Health, by U. Ergelen
- TUR/RUD/002/18 Squatter Settlement Prevention and Upgrading: The Concepts of Planning and Implementation, by A. Türel
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¹ Papers available on request from the Environmental Health Service, WHO Regional Office for Europe.

